

Facility: U.S. Department of Energy, Hanford

ID No. WA789000 8967

Date of Inspection: June 2&3, 1993

Date of Report: June 24, 1993

Address: Hanford Reservation  
Richland, Washington 99352

Report Prepared By: Jack Boller, Environmental Protection Specialist  
Washington Operations Office  
EPA Region 10

Inspector: Jack Boller, EPA/WOO *Jack Boller*  
Steve Moore, Ecology

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Purpose:

This inspection was conducted to gather information on facility compliance with applicable regulations for management of hazardous waste under the Washington State and United States hazardous waste laws.

Facility Process Information:

The Hanford Reservation is approximately 570 square miles in area, located in Benton County, Richland, Washington. In early 1943, the U.S. Army Corps of Engineers selected the Hanford site as the location for reactor, chemical separation, and related facilities and activities for the production and purification of plutonium. Activities at the sites are centralized in numerically designated areas. The reactor facilities are located along the Columbia River in what are known as the 100 areas. The reactor fuel processing and waste management facilities are in the 200 Areas. The 300 Area contains the reactor fuel manufacturing areas and the research and development laboratories. The Fast Flux Test Facility is with maintenance and the nonradioactive dangerous waste landfill is located in the 600 Area. Administrative buildings are located in the 700 Area in downtown Richland.

The reservation is owned and operated by the U.S. Department of Energy (DOE) through its contractors of which Westinghouse Hanford Company (WHC) is the prime contractor. The other contractors at the reservation are: Pacific Northwest Laboratory (PNL); Hanford Environmental Health Foundation (HEHF); and Kaiser Engineers Hanford Company (KEH).

Early in 1989 DOE, Ecology, and EPA signed an agreement that set down a schedule for permitting, closure, and corrective action under both RCRA and CERCLA. Closures are being conducted. The facility is operating as an interim status land disposal facility.

### Notification and Permits:

The original notification was filed in 1980. DOE is pursuing final permits under the tri-party agreement.

### Inspection:

On June 2, 1993, Steve Moore and I arrived at the 300 Area on the US DOE Hanford Nuclear Reservation. We were met by Kyle Webster and Glen Thornton of Battelle Northwest Labs (BNWL). We toured the hazardous waste storage unit in building 305B managed by BNWL. Approximately 1000 drums are shipped off annually from this unit. The storage unit is inside the building and is well designed with secondary containment and separate bays for different waste categories.

Manifests and LDR notices were reviewed. No violations were noted. BNWL has implemented an active waste minimization program which includes a chemical exchange.

From here we moved to building 309 which is managed by Westinghouse Hanford (WHC). Thirty drums of state only waste consisting of ethyleneglycol were being held in a large outdoor sump. The waste was generated by a leak inside the building. WHC has been unable to ship the waste off site because of failure to get DOE clearance. DOE considers the waste to be subject to a moratorium on shipping waste which may have contacted radio active materials. Ecology has been working with them to resolve this problem.

At this point we broke for lunch. Following lunch we went to the 607 building operated by Kaiser. A less than 90 day accumulation pad is operated outdoors at this site. There were also several satellite accumulation containers at the site. Waste from various construction and maintenance projects around the reservation is accumulated in these containers.

From here we moved to building 222-s where Kaiser operates several laboratories. An issue that Ecology has been looking at here involves satellite accumulation. The labs generate radioactive mixed waste and collect it in 5 gallon or smaller satellite containers. When the containers are full they are moved to a less than 90 day accumulation area in the building. A 55 gallon drum which is kept in an interim status storage area is then brought to the less than 90 day area and the waste is added to it. The drum is then returned to the storage area. Following our tour of the labs, we ended our inspection for the day.

On June 3, 1993, we resumed our inspection at the 616 building which is the WHC interim status storage unit. We toured the unit and found no violations. I asked to see the training records for the staff managing the unit. I was told by Mike Stevenson of WHC that I could not have access to the training records without first going through the Freedom of Information Act process. This is a continuing issue that was identified on last year's inspection.

From here we moved to the Central Waste Complex (CWC0) to discuss the issue of backlog wastes. In November of 1992 WHC began collecting drums of waste that were uncharacterized and neglected. These wastes were called "backlog waste". Containers of mixed waste or non-rad waste were brought to the CWC. After receiving the waste the CWC characterized it to determine proper management. Ecology issued an order and penalty for backlog waste that was found in a tank farm.

We concluded the inspection with a visit to the T-plant in the 200 Area. They are maintaining a satellite accumulation area in a locked cage outside of the building. It was explained that the waste is generated in a radiation zone. Due to DOE requirements it is easier to remove the waste from the radiation zone in small increments as generated then it is to fill a drum in the zone and try to get approval to remove it. This concluded the inspection.

#### Conclusion:

Ecology appears to be establishing a strong and well run RCRA compliance program in the Hanford program Kennewick office. Mr. Moore has developed a good working relationship with the various facility contacts he interacts with. Significant enforcement action has been taken including a penalty. The Hanford program compliance staff have been proactive in trying to establish consistency with the rest of Ecology's Dangerous Waste program.

The main compliance issues identified were:

- Denial of access to training records.
- Special case circumstances applied in identifying satellite accumulation areas.
- Management of backlog wastes.
- Inability to move moratorium wastes off site in a timely manner.

Ecology is working to resolve all of these issues.

## OVERSIGHT INSPECTION FORM

9946 1

Instructions:

The form is divided into two parts. Part 1 is used during the actual inspection to record observations made in the field. Part 2 of the form is used to evaluate the State inspection report relative to field observations. Both parts of the oversight inspection report have to be completed by the EPA oversight inspector. In the remarks column, N/A may be appropriate in some instances.

PART 1

I. Facility Name: US. DOE Hanford

EPA ID #: WA 76900 8967

## Facility

Activities: ☐ Small Quantity Generator

☒ Generator

☐ Transporter

☒ Treatment/Storage/Disposal Facility

## II. Inspection

Type: ☒ CEI

☐ O & M

☐ CME

☐ Lab Audit

☐ Records Review

☐ Compliance Monitoring

☐ CDI

☐ Other (specify) \_\_\_\_\_

## Items To Be

Reviewed: ☐ Full Scope

☒ Limited Scope

## Inspection

Format: ☒ Joint

☐ Independent

## III. EPA Oversight

Inspector: Jack Bollet

Organization: WOO

Telephone: 753-9428

## IV.

## Inspection

Date(s): June 24, 1993

Yes No Remarks

V. Pre-Inspection Review

1. Did the State inspector arrange the logistics of the inspection by assuring:
  - a. facility actively operating?
  - b. EPA properly notified?
2. Did the State transmit requested documents according to the established schedule?
3. Was the inspector prepared to conduct the inspection? The inspector should have pertinent information (permit application, previous inspection reports, waste types handled) and equipment (safety and sampling)?
4. Did the inspector present the appropriate identification and advise the owner/operator of the purpose of the inspection and briefly describe the agenda?

X ———

X ———

none requested

X ———

X ———

VI. Facility Information (Observations)

1. Did the inspector demonstrate or obtain knowledge of the facility processes and an understanding of its RCRA history?
2. Did the inspector conduct a thorough walk-through of the industrial processes and associated hazardous waste generation areas in the facility? Were there any areas not inspected? If so, why?

X ———

X focused on interim status storage unit + known problem areas.

X site too large to cover in one visit.

Yes No Remarks

3. Did the inspector fail to note any violations or improper waste handling activities?

X

4. Did the inspector fail to identify any hazardous waste handling areas not previously identified in previous reports or records?

X

5. Upon identifying a potential violation, did the inspector initiate case development procedures (i.e., gather detailed evidence to support the findings of violations)?

X

6. Did the inspector check the requirements for preparedness and prevention, including adequate aisle space, emergency equipment availability, and access to communications during hazardous waste handling operations?

in prior inspections

7. If applicable, was sampling performed by State personnel in accordance with standard operating procedures specified by the State and/or EPA?

no sampling

8. Was proper safety and sampling equipment used to perform the sampling?

~~X~~

9. Was the inspector helpful to the owner/operator by providing explanation of the regulations?

X

Yes No Remarks

10. Was the inspector able to answer questions accurately or commit to provide answers at a later date?

X \_\_\_\_\_

11. If the facility was permitted, did the inspector determine compliance with permit-specific conditions?

units inspected were I.S.  
\_\_\_\_\_

12. Did the inspector perform an exit interview with the owner/operator summarizing the key findings of the inspection?

X \_\_\_\_\_

NOTE: The inspector should not make a finding of violation during the inspection, but should only discuss the findings.

VII. Knowledge of the Regulations

1. Was the inspector knowledgeable about hazardous waste regulations applicable to the facility?

X \_\_\_\_\_

2. Was the inspector aware of recent amendments to the regulations that may affect the conduct of the inspection?

X \_\_\_\_\_

**VIII. Document Inspection (Review)****Yes No Remarks or Not Applicable**

(Please note if review was performed prior to or during inspection)

1. Did the inspector thoroughly review the following documents?

**A. For Generators:**

-Inspection records for hazardous waste storage areas

in prior inspections

-Personnel training records

facility denied access

-Contingency plan

in prior inspections

-Emergency equipment testing and maintenance records

in prior inspections

-Waste analysis records

in prior inspections

-Manifests and exception reports

in prior inspections

-State annual and/or EPA biennial reports

in prior inspections

-Waste minimization plan

in prior inspections**B. In addition, for TSDF's:**

-Part A permit application or final issued permit

in prior inspections

-Part B application prior to permit issuance

done by permit staff

-Operating record

-Waste analysis plan

-Inspection schedule

-Closure and Post Closure Plan

-Financial instruments

-Ground Water Monitoring/Reports

-Other information (treatment plant operations, internal correspondence)

in prior inspections

not required at Fed. facilities.X



PART 2

INSPECTION REPORT REVIEW

	Yes	No	Remarks
<b>I. Review of Inspection Report</b>			
1. Did the inspector submit the completed inspection report within the established SEA or grant deadlines?			<u>See comments</u>
2. Did the inspection report contain factual observations rather than opinion?			
Comments: <u>This is a large facility and several inspections are done through the year to cover the facility and assure compliance. Reports are thorough and well written.</u>			
3. Was the report accurate and did it sufficiently document all the violations? Were the regulations interpreted correctly?			<u>X</u>
4. Did the report contain a discussion of changes that have occurred at the facility since the previous inspection?			<u>X</u>
If not explain items that should have been included:			
5. Did the inspection report accurately reflect the EPA oversight inspector's observations? If not, explain the differences:			<u>X</u>

II. **Remarks**

1. What is your overall assessment of the inspection and the inspection report?

Compliance staff at Hanford are doing a good job of conducting inspections to determine compliance. Enforcement followup is pursued when appropriate.

2. Describe recommendations that may improve the quality of the State inspection and/or inspection report?

none.

NOTE: Indicate whether the inspector is in need of additional training or is lacking in a particular skill (e.g. hazardous waste sampling) needed for an adequate inspection.

3. Comments on the inspection that could have a bearing on the State inspector evaluation (e.g., facility status under litigation, inadequate time allocated to perform inspection, complex industrial processes and waste handling practices, or numerous regulated units located on site).

With two federal agencies (EPA + DOE) and one state agency involved the facility is very political. Radioactive mixed waste issues further complicate matters.